

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer color-matching apparatus for paints comprising: (A) a colorimeter, (B) a micro-brilliance-feeling measuring device, and (C) a computer in which a plurality of paint blends, ~~the~~ color data and micro-brilliance-feeling data corresponding to each of the paint blends, and color characteristic data and micro-brilliance-feeling data of a plurality of full-color paints are entered, and a color-matching calculation logic using the paint blends and the data operates.

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2. (Currently Amended) The computer color-matching apparatus according to claim 1, wherein color numbers corresponding to a the plurality of paint blends entered in the computer (C) are entered in the computer.

3. (Currently Amended) The computer color-matching apparatus according to claim 1, wherein a the colorimeter (A) is a multiangle colorimeter.

4. (Currently Amended) A computer color-matching method for brilliant paints ~~of~~ for executing the following steps (1) to (3) by using a computer color-matching apparatus ~~constituted of comprising~~ (A) a colorimeter, (B) a microbrilliance-feeling measuring device, and (C) a computer in which a plurality of paint blends, color data and micro-brilliance-feeling data corresponding to each of the paint blends, and color characteristic data and micro-brilliance-feeling characteristic data of a plurality of full-color paints are entered, and a color-matching-calculation logic using the paint blends and the data operates to execute:

(1) ~~a step of~~ measuring a paint film of a reference color to which ~~the~~ a color of a paint should be adjusted through color-matching by a the colorimeter to obtain color data of the reference color;

(2) ~~a step of~~ measuring the paint film of a the reference color to which the color of a the paint should be adjusted through color-matching by a the micro-brilliance-feeling measuring device to obtain microbrilliance-feeling data of the reference color; and

(3) ~~a step of~~ comparing the color data and the micro-brilliance-feeling data of the reference color with color data and micro-brilliance-feeling data corresponding to paint blends previously entered in a the computer, indexing the degree of matching of the color and micro-brilliance feeling of the entered paint blends, and selecting a prospective paint blend.

5. (Currently Amended) The computer color-matching method according to claim 4, further executing (4) ~~a step of~~ correcting a selected paint blend by a color-matching-calculation logic after the step (3) to obtain a corrected blend closer to a reference color.

6. (Canceled)

7. (Currently Amended) A computer color-matching method ~~of for~~ executing the following steps (5)(1) to (7)(3) by using a computer color-matching apparatus ~~constituted of~~ comprising (A) a colorimeter, (B) a micro-brilliance-feeling measuring device, and (C) a computer in which a plurality of color numbers, paint blends corresponding to the color numbers, color data and micro-brilliance-feeling data corresponding to each of the paint blends, and color characteristic data and micro-brilliance-feeling data of a plurality of full-color paints, and color-matching-calculation logic using the paint blends and the data operates to execute:

(5)(1) ~~a step of~~ measuring a paint film of a reference color to which a paint color should be adjusted through color-matching by a the colorimeter to obtain the color data of the reference color;

(6)(2) ~~a step of~~ measuring the paint film of the reference color to which the paint color should be adjusted through color-matching by a the micro-brilliance-feeling measuring device to obtain the micro-brilliance-feeling data of the reference color; and

~~(7)~~(3) ~~a step of~~ selecting color data and micro-brilliance feeling data of at least one paint blend having the same color number as ~~the~~ a preset color number of the reference color, comparing the color data and the micro-brilliance-feeling data of the selected paint blend with the color data and the micro-brilliance-feeling data of the reference color, indexing the degree of matching of the color and micro-brilliance feeling of the selected paint blend, and selecting a prospective paint blend.

a27 8. (Currently Amended) The computer color-matching method according to claim 7, further executing ~~(8)~~ (4) ~~a step of~~ correcting the selected prospective paint blend by a color-matching-calculation logic to obtain a corrected paint blend closer to the reference color.

9. (Canceled)

10. (Currently Amended) The computer color-matching apparatus according to claim 2, wherein a the colorimeter (A) is a multiangle colorimeter.

11. (Previously Presented) The computer color-matching method according to claim 5, wherein the prospective paint blend obtained in step (3) or the corrected blend obtained in step (4) is transferred to an electronic balance.

12. (Currently Amended) The computer color-matching method according to claim 8, wherein the prospective paint blend obtained in step ~~(7)~~ (3) or the corrected blend obtained in step ~~(8)~~ (4) is transferred to an electronic balance.

13. (New) The computer color-matching apparatus according to claim 1, wherein the micro-brilliance-feeling measuring device comprises:

a light irradiation device operable to irradiate light to a paint film surface;

a camera operable to photograph the light-irradiated paint film surface; and

an image analyzer operable to analyze an image photographed by the camera.

14. (New) The computer color-matching apparatus according to claim 13, wherein the camera is a CCD camera.

15. (New) The computer color-matching apparatus according to claim 13, wherein the image photographed by the camera is a two-dimensional image which is divided into a plurality of partitions.

a²¹ 16. (New) The computer color-matching apparatus according to claim 15, wherein the micro-brilliance-feeling measuring device measures a brightness of each of the plurality of partitions, and

wherein the brightness is a digital gradation showing a shading value of the two-dimensional image photographed by the camera for each partition.

17. (New) The computer color-matching method according to claim 4, wherein the micro-brilliance-feeling measuring device photographs a surface of a paint film and obtains a two-dimensional image.

18. (New) The computer color-matching method according to claim 17, wherein the micro-brilliance-feeling measuring device divides the two-dimensional image into a plurality of partitions.

19. (New) The computer color-matching method according to claim 18, wherein the micro-brilliance-feeling measuring device measures a brightness of each of the plurality of partitions, and

wherein the brightness is a digital gradation showing a shading value of the two-dimensional image photographed by the camera for each partition.

20. (New) The computer color-matching method according to claim 7, wherein the micro-brilliance-feeling measuring device photographs a surface of a paint film and obtains a two-dimensional image.

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21. (New) The computer color-matching method according to claim 20, wherein the micro-brilliance-feeling measuring device divides the two-dimensional image into a plurality of partitions.

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22. (New) The computer color-matching method according to claim 21,
wherein the micro-brilliance-feeling measuring device measures a brightness of each of the plurality of partitions, and
wherein the brightness is a digital gradation showing a shading value of the two-dimensional image photographed by the camera for each partition.
